# FORTMNO OPERATOR'S MANUAL 

## FACSIMILE

MODEL PFX-50<br>(Incl. Installation Instructions)

© FURUNO ELECTRIC CO., LTD.
-Your Local Agent/Dealer

9-52, Ashihara-cho Nishinomiya, Japan
$\begin{array}{ll}\text { Telephone: } & 0798-65-2111 \\ \text { Telefax: } & 0798-65-4200\end{array}$

AIl rights reserved Printed in Japan

PUB. No. OME-55896
(TENI) PFX-50(FAX)

FIRST EDITION : DEC. 1994 D : OCT. 2, 2000


## $\triangle$ SAFETY INSTRUCTIONS

"DANGER", "WARNING" and "CAUTION" notices appear throughout this manual. It is the responsibility of the operator and installer of the equipment to read, understand and follow these notices. If you have any questions regarding these safety instructions, please contact a FURUNO agent or dealer.

## $\triangle$ DANGER

This notice indicates a potentially hazardous situation which, if not avoided, will result in death or serious injury.

## $\triangle$ WARNING

This notice indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

This notice indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury, or property damage.

## Safety Instructions for the Operator

## $\triangle$ WARNINC



Do not open the equipment except tp replace paper.

Hazardous voltage which can cause electrical shock, burn or serious injury exists inside the equipment. Only qualified personnel should work inside the equipment.

Do not disassemble or modify the equipment.

Fire, electrical shock or serious injury can result.

Turn off the power immediately if water leaks into the equipment or the equipment is emitting smoke or fire.

Continued use of the equipment can cause fire or electrical shock.

Do not place liquid-filled containers on the top of the equipment.

Fire or electrical shock can result if a liquid spills into the equipment.

Do not operate the equipment with wet hands.

Electrical shock can result.
Keep heater away from equipment.
Heat can alter equipment shape and melt the power cord, which can cause fire or electorical shock.

## © CAUTION

Do not use the equipment for other than its intended purpose.

Personal injury can result if the equipment is used as a chair or stepping stool, for example.

Do not place objects on the top of the equipment.

The equipment can overheat or personal injury can result if the object falls.

## Safety Instructions for the Installer

Do not work inside the
equipment unless totally
familiar with electrical
circuits.
Hazardous voltage which can
cause electrical shock, burn
or serious injury exists inside

the equipment. \begin{tabular}{l}
Turn off the power at the <br>
mains switchboard before <br>
beginning the installation. <br>
Post a sign near the switch <br>
tornedicate it on whould not be the equip- <br>
ment is being installed. <br>

| Fire, electrical shock or |
| :--- |
| serious injury can result if the |
| power is left on or is applied |
| while the equipment is being |
| installed. | <br>

\hline
\end{tabular}

## $\triangle$ CAUTION



Ground the equipment to prevent electorical shock and mutual interference.

Confirm that the power supply voltage is compatible with the voltage rating of the equipment.

Connection to the wrong power supply can cause fire or equipment damage. The voltage rating appears on the label at the rear of the display unit.

Obseave the compass safe distances to prevent deviation of a magnetic compass.

|  | Standard compass | Steering compass |
| :---: | :---: | :---: |
| FAX | 1.6 m | 1.2 m |

## Dialing Subscribers

## (Example) Direct dialing

## - Ship (FELCOM) - Land



- Ship (FELCOM) - Ship (Inmarsat-B)

- Ship (FELCOM) $\rightarrow$ Ship (Inmarsat-A)

- Land - Ship (FELCOM)

Example of Japan


NOTE: After transmission has been completed, wait for 16 seconds to connect newly the line with an LES, otherwise the error message appears, resulting in no connection.

## Table of Contents

Page
Chapter 1 Front Panel Key Function ..... 1-1
Chapter 2 Loading a Recording Paper ..... 2-1
Chapter 3 Preparation ..... 3-1
3.1 Receive Mode ..... 3-1
3.2 Settings of Resolution and Contrast of Document ..... 3-1
Chapter 4 Transmission ..... 4-1
4.1 General ..... 4-1
4.2 Loading a Document ..... 4-2
4.3 Direct Dialing ..... 4-3
4.4 Redialing ..... 4-3
4.5 Abbreviated Dialing (maximum 50 subscribers) ..... 4-3
4.6 One-touch Dialing (maximum 12 subscribers) ..... 4-5
4.7 Multistation Transmission and Memory Transmission ..... 4-6
4.8 Programmed Timer Transmission ..... 4-7
Chapter 5 Reception ..... 5-1
5.1 Paper Save Function ..... 5-1
5.2 Memory Reception ..... 5-1
5.3 Restricted Reception ..... 5-2
Chapter 6 Other Functions ..... 6-1
6.1 Copying a Document ..... 6-1
6.2 Printing out Lists ..... 6-2
Chapter 7 Troubleshooting ..... 7-1
7.1 Error Message ..... 7-1
7.2 All Memory Clear ..... 7-2
Installation Instructions ..... 1
List of Installation Materials ..... A-1
Outline Drawing ..... D-1

## Chapter 1 Front Panel Key Function




## Chapter 2 Loading a Recording Paper

Prior to loading a Recording Paper, verify that the power is ON.
DO NOT switch OFF during the loading.

## Procedure

1. Remove the Document Stacker.


## Recording Paper

| Type | Code No. | Qty |
| :---: | :---: | :---: |
| K52 257 X 50M25TRU (For B4) | $000-806-564$ | $12(1 \mathrm{set})$ |
| K52 216 X 50M25TRU (For A4) | $000-806-565$ | $12(1 \mathrm{set})$ |

2. Open the Recording Paper Cover by pulling up the Recording Paper Cover Release Lever.


Note: 1. Remove the strip of paper inserted to protect the thermal printing head during shipment.
2. Be careful not to touch the print head (gold colored bar under the recording paper cover) when the recording paper cover opened.

## 3. Lift up the Decurling bar.


4. Set the Recording Paper Guide to appropriate position. (Set both right and left guide pieces in either A4 or B4 position)

5. Load a Recording Paper, taking account of its feeding direction.

6. Feed the loaded Recording Paper under the Cutter Guide until paper head appears at paper exit.

7. Position the Decurling bar to the normal place and close the Recording Paper Cover.
8. Press the [START] button. The Recording Paper will be fed out in short length and also be automatically cut. (Verify that the message "READY" is printed.)

## Chapter 3 Preparation

### 3.1 Receive Mode

Change the receive mode setting as follows.


Then, set the receive mode to the "FAX" (Fax only) by pressing the [AUTO RCV/YES] button successively. Each press of this button changes the display as follows.


When the "FAX" is selected, a message from a partner is automatically received without calling tone (Automatic reception).

### 3.2 Settings of Resolution and Contrast of Document


$\longrightarrow$ NORMAL $\rightarrow$ DARK $\rightarrow$ LIGHT $]$
Then press [RESET] button to eject document from facsimile.

## Chapter 4 Transmission

### 4.1 General

There are six types of transmission modes as below.
(1) Direct Dialing
(2) Abbreviated dialing
(3) One-touch dialing
(4) Multistation transmission
(5) Memory transmission
(6) Programmed timer transmission

## Acceptable document

The following document goods are accepted to transmit or copy.

| ITEM | SINGLE SHEET | PLURAL SHEETS |
| :--- | :--- | :--- |
| Width | 148 mm to 257 mm | 148 mm to 257 mm |
| Length | 100 mm to 1000 mm | 100 mm to 297 mm |
| Thickness | 0.05 mm to 0.15 mm | 0.06 mm to 0.12 mm |
| No. of loadable paper | 1 sheet <br> Uncoated on both sides | Up to 10 sheets <br> Uncoated on both sides |

Note: 1. Plural sheets must be the same size and the same type.
2. Personal hand assistance is needed for pages longer than 364 mm .


In addition, a document should be suited to the following requirements:

- No torn, wrinkled, or damp pages
- No folded pages or pages with holes
- No transparent pages
- No cloth or metal sheets
- No pressure sensitive recording paper
- No thermal recording paper

Note that when you use unsuitable documents, copy first them using a standard copy machine.

## About document size and Recording paper size (at partner)

The relation of size between transmission document and recording paper at a partner are as follows.

| TX document size |  | B4 | A4 |
| :--- | :---: | :---: | :---: |
| RX paper size at partner | G3: B4 | B4 | A4 |
|  | G3: A4 | Reduced to $A 4$ | A4 |

### 4.2 Loading a Document

## Procedure

1. Set the Document Guide properly.
2. Insert the document into the machine (face down) as shown below.
[If you are sending two or more pages (up to 10 sheets), note that the bottom sheet enters first.]


Display should look something like the figure below.

3. If necessary, change the resolution and the contrast to enable transmission in the best condition suited to the document, referring to page 3-1.

Note: If you want to cancel the transmission, press the [RESET] button to eject a document.

### 4.3 Direct Dialing

Set a document face down. Then dial numbers as below.

(ex.) Automatic call to subscriber in Japan via Pacific Ocean LES (Perth)

$\frac{222}{\text { Perth }} \frac{00}{$|  Automatic  |
| :--- |
|  Call  |}$\frac{81}{\text { Japan }} \frac{798}{$|  Area  |
| :---: |
|  Code  |}$\frac{6 \cdots \cdots 1}{\text { Fax No. }}$ START

If you misdial, press the [FUNCTION/NO] button and dial again. (To cancel all input data, press the [RESET] button.)

### 4.4 Redialing

The redialing feature automatically redials number last dialed. Press the [REDIAL] button.

### 4.5 Abbreviated Dialing

The abbreviated dialing feature lets you dial a subscriber's number in just two digits. You may register 50 abbreviated dialing numbers, numbered 01 to 50 .

## Registering numbers

Reference: Press a key sequentially within one minute, otherwise display is returned to normal display. Note that you may write over unnecessary facsimile number.

1. Press the [FUNCTION/NO] button twice.
```
TEL NUMBER ENTRY?
```

2. Press the [AUTO RCV/YES], [FUNCTION/NO] and [AUTO RCV/YES] buttons in that order.
```
ABB. NUMBER = (01-50)
```

3. Enter abbreviated dialing number followed by the [AUTO RCV/YES] button.
```
TEL =
```

4. Enter facsimile number (maximum 38 figures) and [\#] followed by the [AUTO RCV/YES] button.

$$
I D=
$$

5. Enter subscriber's name (maximum 20 figures) referring to page 4 at the end of this manual. Then press the [AUTO RCV/YES] button.
(ex) Name: A B C $\Rightarrow$ Type 747576 in that order. 747576

If no input is required, simply press the [AUTO RCV/YES] button.


## Deleting abbreviated dialing number

1. Do steps 1 to 3 shown above. Then press the [FUNCTION/NO] and [AUTO RCV/YES] buttons in this order.

2. Press the [FUNCTION/NO] button twice to return to normal display.

## Abbreviated dialing

1. Set a document face down.
2. Press the [ABB. DIAL] button.
3. Key in abbreviated dialing number followed by the [START] button.

### 4.6 One-touch Dialing (maximum 12 subscribers)

## Registering numbers

1. Press the [FUNCTION/NO] button twice.
```
TEL NUMBER ENTRY?
```

2. Press the [AUTO RCV/YES] button twice.
```
ENTER ONE TOUCH KEY
```

3. Press a one-touch button numbered 01 to 12 .
```
TEL =
```

4. Enter facsimile number (maximum 38 figures) and [\#] followed by the [AUTO RCV/YES] button.
```
ID =
```

5. Enter subscriber's name (maximum 20 figures) referring to page 4 . Then press the [AUTO RCV/YES] button. If no input is required, simply press the [AUTO RCV/YES] button.


## Deleting one-touch dialing number

1. Do steps 1 to 3 shown above. Then press the [FUNCTION/NO] and [AUTO RCV/YES] buttons in this order.

2. Press the [FUNCTION/NO] button twice to return to normal display.

## One-touch dialing

1. Set a document face down.
2. Press a one-touch dialing number ( $01-12$ ).


### 4.7 Multistation Transmission and Memory Transmission

When it is required to send a document to various subscribers, use the multistation transmission. At first set a document face down.

## Procedure (for both transmissions)

1. Press the [MEMORY] button.

2. Enter subscriber's number. The following methods are available for data entry. (See note 1 on next page.)

- Direct dialing (maximum five subscribers)
- Abbreviated dialing
- One-touch dialing

3. Press the [AUTO RCV/YES] button.

ENTER MODE OR [START]
4. Only for the multistation transmission, repeat steps 2 and 3 to enter another subscriber's number.
5. Press the [START] button to memorize the data of the document.

MEMORY $\times \times \%$ USED

The document is ejected and calling is automatically started.
(The "MEMORY" lamp lights until all callings are terminated.)
If you want to stop this operation on the way, press the [RESET] button.
Note 1. If you select abbreviated (or one-touch) dialing number not registered, an error beep sounds. (Error message "NUMBER NOT LISTED" appears momentarily.)

### 4.8 Programmed Timer Transmission

This equipment can be programmed to send data at a specific time.


If you want to cancel timer transmission, press the [RESET] button.


A document is ejected and a cancel list is printed out.

## Chapter 5 Reception

As mentioned on page 3-1, the receive mode should be set to the "FAX" (Fax only) with the [AUTO RCV/YES] button.

### 5.1 Paper Save Function

This equipment enables the reduced printing ( $50 \%$ reduction) of a received document in order to save a recording paper.

1. Press the [FUNCTION/NO] button three times
```
INSTALLATION (FAX)?
```

2. Press the [AUTO RCV/YES], [FUNCTION/NO], [AUTO RCV/YES], [FUNCTION/NO] and [AUTO RCV/YES] buttons in that order.
```
ON?
```

3. Press the [AUTO RCV/YES] button to set this function to ON.

Note: If you want to turn this function off, do steps 1 and 2 shown above then press the [FUNCTION/NO] and [AUTO RCV/YES] buttons.

### 5.2 Memory Reception

Although a recording paper runs out completely or it is jammed during reception, a receive message is stored in the memory. (The "MEMORY" lamp lights.) The power should be on. If it is turned off, the contents in the memory will be erased.

After a recording paper is set correctly, press the [START] button to print out the receive message.

### 5.3 Restricted Reception

This function allows you to receive only the messages from the subscribers registered by the abbreviated dialing and the one-touch dialing (maximum 62 subscribers).

- [FUNCTION/NO] three times $\rightarrow$ [AUTO RCV/YES] $\rightarrow$ [FUNCTION/NO] twice $\rightarrow$ [AUTO RCV/YES] $\rightarrow$ [FUNCTION/NO] three times



## Chapter 6 Other Functions

### 6.1 Copying a Document

For 44


For B4


### 6.2 Printing out Lists

## Communication Journal

Press [FUNCTION/NO], [AUTO RCV/YES] twice in that order. A communication journal for both transmission and reception is printed out as below.

(*1) If an error number appears, refer to the Table shown below.

## Error Code Table

| Error Code | Meaning |
| :---: | :--- |
| 10 | A recording paper shortened or empty. |
| 11 | A recording paper jammed. |
| 12 | A document jammed. |
| 13 | The recording paper cover opened. |
| 20 | The power supply cut off. |
| 25 | The thermal printing head overheated. |
| 30 | The [RESET] button pressed during communication. |
| 42 | The memory overflowed. |
| 50 | A communication line is busy although the [REDIAL] button is <br> pressed 3 times. |
| $80,82,83,84,86$ | The problem occurs in the communication circuit or in a machine of <br> receive partner. |

## Telephone (facsimile) Number List

Press the [FUNCTION/NO], [AUTO RCV/YES], [FUNCTION/NO] and [AUTO $\mathrm{RCV} / \mathrm{YES}]$ in that order to print out the list.

| * TELEPHONE NUMBERS LIST * |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | TIME | : May 10'95 11:45 |
|  |  | TEL NU | : 872310090810 |
| ONE TOUCH KEY INFORMATION |  | NAME | : FURUNO |
| OT NBR | NAME | TEL NUMBER |  |
| 02 | B | 222222 |  |
| 12 |  | 11111111111 |  |
| ABBREVIATED TEL NUMBER INFORMATION |  |  |  |
| ABB.NBR NAME TEL NUMBER |  |  |  |
| 01 A 321456789999 |  |  |  |

## Function List

- [FUNCTION/NO] $\rightarrow$ [AUTO RCV/YES] $\rightarrow$ $[$ FUNCTION/NO] twice $\rightarrow[$ AUTO RCV/YES] $\Rightarrow$ Printing is started.


## Transmission Report

Every time a transmission is terminated, its result (same as transmission journal on page 6-2) is printed out. Follow the procedure shown below.

- [FUNCTION/NO] three times $\rightarrow$ [AUTO RCV/YES] $\rightarrow$ [FUNCTION/NO] three times $\rightarrow$ [AUTO RCV/YES] $\rightarrow$ [FUNCTION/NO] $\rightarrow$ [AUTO RCV/YES]


Returns to normal display.

## Multi Transmission Report

- [FUNCTION/NO] three times $\rightarrow$ [AUTO RCV/YES] $\rightarrow$ [FUNCTION/NO] three times $\rightarrow$ [AUTO RCV/YES] $\rightarrow$ [FUNCTION/NO] twice $\rightarrow$ [AUTO RCV/YES]


Returns to normal display.

## Chapter 7 Troubleshooting

### 7.1 Error Message

This facsimile equipment continuously monitors own status and displays an alert message for approximately two seconds if an error is detected.

## Operation error

| Error Message | Meaning and Action (Marked *) |
| :--- | :--- |
| PUT IN DOCUMENT | No document loaded on the stacker. <br> * Operate again from the beginning after a document is loaded. |
| NUMBER NOT <br> LISTED | An inputted number is not registered. <br> * Check registration of the number desired. |
| SORRY NOT <br> POSSIBLE | An inappropriate data is inputted. <br> * Input an appropriate data. |

## Communication error

| Error Message | Meaning and Action (Marked *) |
| :--- | :--- |
| TPH OVERHEAT | The overheat protecting function is activated. <br> * Wait until cooled. |
| COVER OPEN | The Recording Paper Cover opened. <br> * Close the Rrecording Paper Cover properly pressing the both <br> sides of the Recording Paper Cover. |
| PAPER EMPTY | No Recording Paper. <br> * Load a new Recording Paper. |
| PAPER JAM | The Recording Paper jammed. <br> * Remove the jammed Recording Paper and load the Recording <br> Paper correctly, and then press the [START] button. |
| DOCUMENT JAM | A document jammed. <br> * Open the Front Panel by pulling up the Front Panel Release <br> Lever, then put out the document jammed. |
| LINE BUSY | The facsimile communication circuit is not connected although the <br> [REDIAL] button is pressed. <br> * Press the [RESET] button and try to send a document again. |
| COMMUNICATION | Transmission or reception failed. <br> * Press the [RESET] button and check the status and error code by <br> printing out the Communication Journal. Refer to page 6-2. |

(Continued on the next page)

| Error Message | Meaning and Action (Marked *) |
| :--- | :--- |
| POWER FAILURE | The power supply cut off during communication. <br> * Press the [RESET] button and check the status and error code by <br> printing out the Communication Journal. Refer to page 6-2. |
| MEMORY <br> OVERFLOW | The memory capacity is full. (The contents in the memory will be <br> cleared.) <br> * Operate again from the beginning of call. |
| MEMORY ERASED | All contents of the memory erased. <br> * Press the [RESET] button and set up all system (function) <br> settings again. |

Note: When an error message can not be erased, press the [RESET] button. If it is still displayed, however, turn the power off once and turn it on again, then press the [RESET] button.

### 7.2 All Memory Clear

When the procedure shown below is carried out, all contents in the memory such as the telephone (facsimile) number list, function list, initial setting (function parameter setting as well) at installation, etc. will be erased. Therefore, it is recommended to print out those data before clearing, referring to pages 6-3 and 5.

1. Turn the power off.
2. While pressing and holding down the [1], [3] and [*] keys together, turn the power on.
3. Preset (reenter) various settings (data).

## Installation Instructions

## 1. Mounting

## Mounting considerations

- Select a place where temperature and humidity are stable and moderate.
- Select a place where dust is minimal.
- Leave sufficient space around the sides and rear of the unit for maintenance and checking.
- This unit cannot be fixed to a bulkhead.
- Mount this unit in parallel with "fore-aft" line (ship's keel line) to minimize vibration of paper by ship's rolling.


## Mounting

Attach the double-sided tapes (supplied) to the rear side of the facsimile, referring to the Outline Drawing on page D-1. Mount the unit on a tabletop, where it can be easily operated.


## 2. Connection

Connect a modular plug to the "LINE" jack on the rear side of the PFX-50. See the figure below. Another modular plug should be connected to either the Junction Box via a modular jack box or the Communication Unit directly, depending on number of facsimile. For further details, refer to the Installation Manual of the FELCOM.

## 3. Changing dialing format

Change dialing format from "pulse (dial)" to "pushbutton".


After connection is completed, attach the English language seal (supplied) to the front panel of the facsimile. Further, both the compass safe distance seal and Inmarsat "B" seal (supplied) should be attached to the facsimile.

## 4. Clearing contents of RAM

To clear all contents of RAM, turn the power on while pressing and holding down the [1], [3] and [*] keys together.

## 5. Initial setting

After clearing contents of RAM, display should look something like the figure shown below. Set and enter the followings:
(1) Your ship's name
(2) Your facsimile number
(3) Dialing format
(4) Date and time

They are printed out at the top of a receive message at a partner side.
$\qquad$


Example: A1D
Enter your ship's name (maximum 20 characters), referring to the Table on the next page.


TABLE OF THE CHARACTER CODE FOR ENGLISH ALPHABET, SYMBOL

| LETTER | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CODE | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
| LETTER | SPACE | 0 | $"$ | -- | , | 1 | $:$ | $($ | - |  |
| CODE | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 |  |
| LETTER | A | B | C | D | E | F | G | H | I | J |
| CODE | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 |
| LETTER | K | L | M | N | O | P | Q | R | S | T |
| CODE | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 |
| LETTER | U | V | W | X | Y | Z |  |  |  |  |
| CODE | 94 | 95 | 96 | 97 | 98 | 99 |  |  |  |  |

## 6. Changing language from Japanese to English



## 7. Setting Modem Speed, Turning Line Monitor On/Off

## Default settings

Modem speed: 9600 bps
Line monitor:
Off

1. Turn the power on while pressing [1] and [3] keys to get into the test mode. Release the keys when the date appears. (Now you are in test mode.)
2. Press [FUNCTION/NO], [8], [FUNCTION/NO] (three times) and [AUTO RCV/YES] in that order.
```
FUNCTION O = 00010010
```

3. Press $0,0,0,1,0,0,0,0$ in that order to change modem speed from 9600 bps to $2400 \mathrm{bps}, 10: 9600 \mathrm{bps}, 00: 2400 \mathrm{bps}$.
(If wrong number is entered, press [FUNCTION/NO] to clear.)
4. Press [AUTO RCV/YES] several times to display the following.
```
FUNCTION 18 = 00000110
```

5. Press $0,0,0,0,0, \underset{\downarrow}{\downarrow}, \underline{1}$ in that order.
(Line Monitor Setting: ON)
6. Press [AUTO RCV/YES] and [RESET]. The parameter setting is completed.
7. To print out function list and parameter setting, press [FUNCTION/NO], [1], [AUTO RCV/YES], [FUNCTION/NO] twice and [AUTO RCV/YES]. The printing is started.
8. To return to the normal display, turn the power off once and turn it on again.

| CODE NO | $000-043-321$ | $6 \mathrm{AC}-\mathrm{X}-9414$ |
| :---: | :--- | :--- |
| TYPE | CP16-00590 |  |



FURUNO ELECTRIC CO., LTD
FOUREME


REVISION RECORD OF OPERATOR'S/INSTALLATION MANUAL

MODEL: $\ldots$ PFX-50 PUBLICATION NO. : OME-55896

